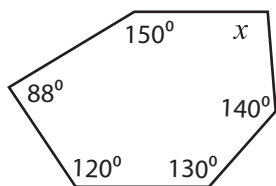


### Interior Angle

Example:



$$\text{Sum of the interior angles} = (\text{Number of sides} - 2) \times 180^\circ$$

$$= (6 - 2) \times 180^\circ$$

$$= 4 \times 180 = \mathbf{720^\circ}$$

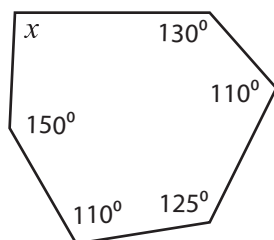
$$\text{Sum of the interior angles} = 120^\circ + 140^\circ + 130^\circ + 150^\circ + 88^\circ + x$$

$$\mathbf{720^\circ} = 628^\circ + x$$

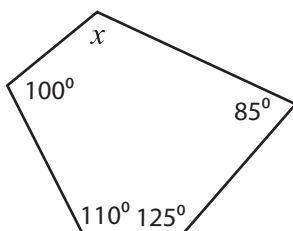
$$x = \mathbf{720^\circ} - 628^\circ = \mathbf{92^\circ}$$

Find the interior angle for each irregular polygon.

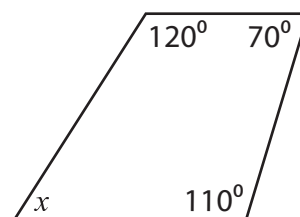
1)



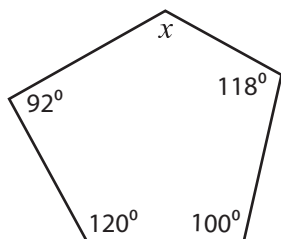
2)



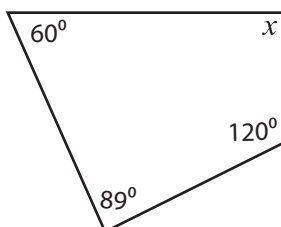
3)

Sum of the interior angles = Sum of the interior angles = Sum of the interior angles =  $x =$   $x =$   $x =$  

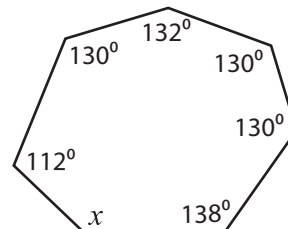
4)



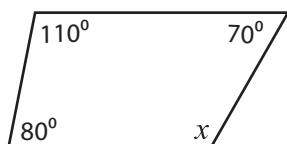
5)



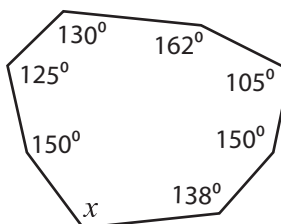
6)

Sum of the interior angles = Sum of the interior angles = Sum of the interior angles =  $x =$   $x =$   $x =$  

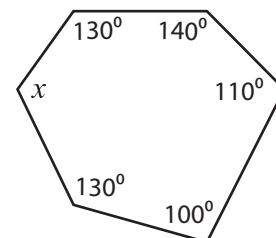
7)



8)

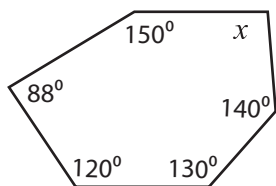


9)

Sum of the interior angles = Sum of the interior angles = Sum of the interior angles =  $x =$   $x =$   $x =$

**Answer Key**

Example:

Sum of the interior angles = ( Number of sides - 2 )  $\times$   $180^\circ$ 

$$= ( 6 - 2 ) \times 180^\circ$$

$$= 4 \times 180 = \mathbf{720^\circ}$$

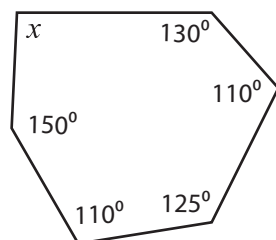
Sum of the interior angles =  $120^\circ + 140^\circ + 130^\circ + 150^\circ + 88^\circ + x$ 

$$\mathbf{720^\circ} = 628^\circ + x$$

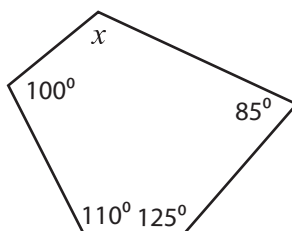
$$x = \mathbf{720^\circ} - 628^\circ = \mathbf{92^\circ}$$

Find the interior angle for each irregular polygon.

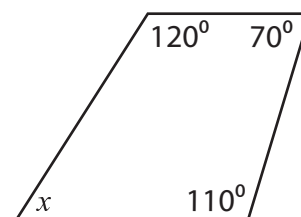
1)



2)



3)

Sum of the interior angles =  $\mathbf{720^\circ}$ 

$$x = \mathbf{95^\circ}$$

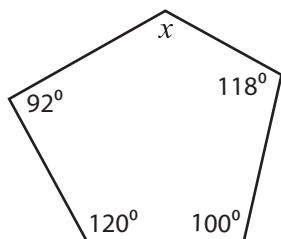
Sum of the interior angles =  $\mathbf{540^\circ}$ 

$$x = \mathbf{120^\circ}$$

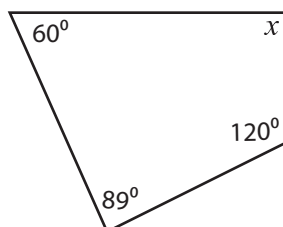
Sum of the interior angles =  $\mathbf{360^\circ}$ 

$$x = \mathbf{60^\circ}$$

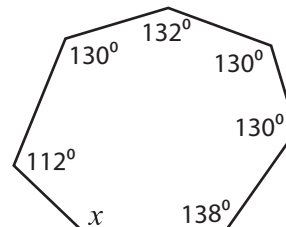
4)



5)



6)

Sum of the interior angles =  $\mathbf{540^\circ}$ 

$$x = \mathbf{110^\circ}$$

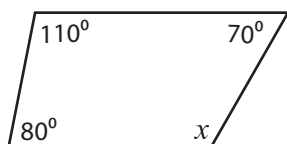
Sum of the interior angles =  $\mathbf{360^\circ}$ 

$$x = \mathbf{91^\circ}$$

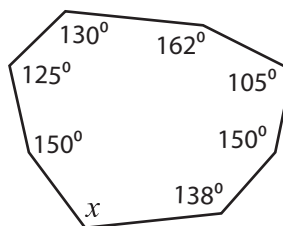
Sum of the interior angles =  $\mathbf{900^\circ}$ 

$$x = \mathbf{128^\circ}$$

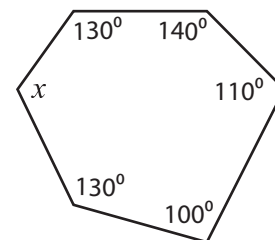
7)



8)



9)

Sum of the interior angles =  $\mathbf{360^\circ}$ 

$$x = \mathbf{100^\circ}$$

Sum of the interior angles =  $\mathbf{1080^\circ}$ 

$$x = \mathbf{120^\circ}$$

Sum of the interior angles =  $\mathbf{720^\circ}$ 

$$x = \mathbf{110^\circ}$$